

### **REMARKS**

Applicant has carefully reviewed and considered the Office Action mailed on February 5, 2003, and the references cited therewith.

Claims 1, 2, 3, 4, 5, 6, 7, and 8 are amended, and claim 17-19 is added; as a result, claims 1, 2, 3, 4, 5, 6, 7, 8, 12, 13, 14, 15, 16, 17, 18, and 19 are now pending in this application. Support for the amendment to claim 1 and claims 17-19 can be found in applicants' specification at page 4, line 16 to page 5, line 3. No new subject matter is added.

#### **Supplemental Information Disclosure Statement**

Applicant respectfully submits all additional relevant documents, which were referred to in the specification were cited or are cited in the attached Supplemental Information Disclosure Statement. Applicants believe that the EP documents listed in the specification that were not provided have been cited as their corresponding- U.S. patents. Applicants direct the Examiner's attention to the table with the cited U.S. documents and the corresponding EP application no. below.

Document No. from Disclosure	Corresponding U.S. Patent No.
EP 0 270 126	4,795,796
EP 0 318 999	4,942,213
EP 0 417 490	5,130,463
EP 0 438 836	5,399,294

In addition, Applicants provides a full translation of JP 63-154769, which was previously submitted in a Supplemental Information Disclosure Statement filed on February 12, 2002. Therefore, Applicant requests that the documents submitted in the Supplemental Information Disclosure Statement be marked as being considered and initialed by the Examiner, be returned with the next official communication.

#### **§112 Rejection of the Claims**

**Claims 1-8 and 12-16 were rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which**

**Applicant regards as the invention.** The Examiner asserts that the term molecular weight is unclear. To the extent that this rejection may be maintained with respect to the pending claims, it is respectfully traversed.

Applicants have amended claim 1 to indicate that the molecular weight of the polymer is a number average molecular weight ( $M_n$ ). This is supported by the specification in the table at page 13-14. Accordingly it is respectfully requested that the objection under 35 USC § 112 be withdrawn.

*§103 Rejection of the Claims*

**Claims 1-8 and 12-16 were rejected under 35 USC § 103(a) as being allegedly unpatentable over Legrand et al. (WO 97/28200; equivalent application: AU 199716064 B2; the '064 application).** Legrand is said to disclose pigment dispersants having a polymer produced by polymerization of a hydrophilic macromer and another monomer. To the extent that this rejection may be maintained with respect to the pending claims, it is respectfully traversed.

The Examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the Examiner does not establish a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness. M.P.E.P. §2142. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves, or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all of the claim limitations. M.P.E.P. §2142.

The branched polymers of the invention comprise a mixture of monomers including 50 to 93 wt.% of at least one ethylenically unsaturated monomer, wherein the monomer includes an acrylate ester or a methacrylate ester of a straight or branched alcohol having from 1 to 22 carbon atoms, 2 to 25 wt.% of at least one ethylenically unsaturated macromonomer with a molecular weight of 1,000 to 20,000 and 5 to 25 wt.% of at least one polymerisable imidazole derivative. The macromonomer has an unsaturated group to react with the other vinyl monomers when forming the backbone of the polymer.

The polymers of the '064 application are graft co-polymers that require multiple sequences, a sequence that allows the co-polymers to be anchored to solid particles, and at least two sequences of hydrophilic and hydrophobic character. Thus, the graft co-polymer of the '064 application has three sequences of distinct chemical nature, one or more sequence(s) for anchoring to solid particles, one or more sequence(s) of hydrophilic character and one or more sequence(s) of hydrophobic character. (See '064 specification, at page 3, lines 8-12 and lines 25-30, corresponding '064 Australian application.)

In addition, the '064 application specification and examples disclose that the co-polymer is a "graft" copolymer of a macromonomer. The macromonomers of Legrand are telomers having reactive groups, *e.g.*, hydroxy groups, amine groups and acid groups. See the '064 specification, at page 14, line 28, to page 15, line 14, page 26, lines 11-24 and Table 1 at page 34.

Thus, the copolymers disclosed in the '064 application are different from the claimed polymers, which have macromonomers having a reactive, *e.g.*, a vinylic group that can react with the other monomers to provide the branched polymers. It is respectfully submit that it would not be obvious a skilled artisan to prepare applicants branched polymer by reading the disclosure of the '064 specification. Accordingly, it is respectfully requested that the rejection under 35 USC § 103(a) over Legrand be withdrawn.

**Claims 1-8 and 12-16 were rejected under 35 USC § 103(a) as being allegedly unpatentable over Tetsuo (JP 63154769).** Tetsuo discloses a pigment dispersant that has a co-polymer having "fatty acid modified (meth)acrylic monomers" in the polymer. To the extent that this rejection may be maintained with respect to the pending claims, it is respectfully traversed.

The requirements for a *prima facie* case of obviousness are recited above.

As amended, the instant claims require that the (A) monomers include an acrylate or methacrylate of a straight or branched alcohol having from 1 to 22 carbon atoms. This is clearly different from the fatty acid modified (meth)acrylic monomers required in Tetsuo. The Tetsuo application does not disclose the (A) monomers, the acrylate or methacrylate esters of the instant claims. There is no teaching or suggestion to substitute the claimed acrylate or methacrylate

esters for the fatty acid modified monomers disclosed in Tetsuo. Thus, one skilled in the art would not be lead to applicants' invention from the teachings of Tetsuo.

Accordingly, it is respectfully requested that the rejection under 35 USC § 103(a) over Legrand be withdrawn.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (612-373-6968) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743

Respectfully submitted,

KARLHEINZ HAUBENNESTEL ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
P.O. Box 2938  
Minneapolis, MN 55402  
612-373-6968

Date

June 5, 2003

By

William F. Prout

William F. Prout

Reg. No. 33,995

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, Washington, D.C. 20231, on this 5<sup>th</sup> day of June, 2003.

PATRICIA A. HULTMAN  
Name

Patricia A. Hultman  
Signature